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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,668	09/07/2006	Akihiro Tsuchiya	113197-048	8674
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BELL, BOYD & LLOYD, LLP P.O. Box 1135 CHICAGO, IL 60690				HUYNH, LOUIS K
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/598,668	TSUCHIYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Louis K. Huynh	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 07 September 2006.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 7-22 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 7-22 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 07 September 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 7, lines 3-4: "a wrapping sheet device that supplies the wrapping sheet onto the transporting path" renders the claim indefinite because the wrapping sheet is supplied onto its own transporting path intersecting the transporting path of the work piece, but not onto the transporting path of the work piece. Note that the preamble set forth the transporting path for the work piece only.

- Claim 7, lines 5-6: “a delivery guide that causes the wrapping sheet to be wrapped by pushing the wrapping sheet on the transporting path” is indefinite because: (1) the wrapping sheet does not wrap the wrapping sheet; and (2) the delivery guide does not push the wrapping sheet to wrap the wrapping sheet. Note that the wrapping sheet is supposed to wrap the work piece, it may overlap but does not wrap itself; and that the work piece pushes the wrapping sheet which pushing is caused by the pusher (9) pushing the work piece toward the transit aperture of the delivery guide device.
- Claim 8, line 2: “smoothing pads that cause the wrapping sheet to contact tightly to a surface of the work piece are provided in the transit aperture” renders the claim indefinite because it is unclear to the structural relationship between the spreading guide and the smoothing pads.
- Claim 9, line 3: “the transporting direction of the work piece” lacks proper antecedent basis.
- Claim 11, line 2: “it” is indefinite because it is unclear as to what “it” is.
- Claim 11, line 2: “the transporting path” is indefinite because it is unclear as to which path applicant is referring.
- Claim 11, lines 5-6: “the spacing between the plurality of suction belts gradually separates on the work piece transporting path side” is indefinite because the spacing between the belts is gradually separates on the transporting path of the wrapping sheet according to the specification and drawings.
- Claim 12, line 2: “it” is indefinite because it is unclear as to what “it” is.

- Claim 12, line 2: “the transporting path” is indefinite because it is unclear as to which path applicant is referring.
- Claim 12, lines 5-6: “the spacing between the plurality of suction belts gradually separates on the work piece transporting path side” is indefinite because the spacing between the belts is gradually separates on the transporting path of the wrapping sheet according to the specification and drawings.
- Claim 13, line 2: “it” is indefinite because it is unclear as to what “it” is.
- Claim 13, line 2: “the transporting path” is indefinite because it is unclear as to which path applicant is referring.
- Claim 13, lines 5-6: “the spacing between the plurality of suction belts gradually separates on the work piece transporting path side” is indefinite because the spacing between the belts is gradually separates on the transporting path of the wrapping sheet according to the specification and drawings.
- Claim 14, line 2: “it” is indefinite because it is unclear as to what “it” is.
- Claim 14, line 2: “the transporting path” is indefinite because it is unclear as to which path applicant is referring.
- Claim 14, lines 5-6: “the spacing between the plurality of suction belts gradually separates on the work piece transporting path side” is indefinite because the spacing between the belts is gradually separates on the transporting path of the wrapping sheet according to the specification and drawings.
- Claim 19, line 2: “the transporting direction of the wrapping sheet” is indefinite because it is unclear as to which direction applicant is referring.

- Claim 20, line 2: “the transporting direction of the wrapping sheet” is indefinite because it is unclear as to which direction applicant is referring.
- Claim 21, line 2: “the transporting direction of the wrapping sheet” is indefinite because it is unclear as to which direction applicant is referring.
- Claim 22, line 2: “the transporting direction of the wrapping sheet” is indefinite because it is unclear as to which direction applicant is referring.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Boriani et al. (US 5,782,063).

- With respect to claim 1, Boriani discloses a wrapping machine (1) that meets all of applicant's claimed subject matter, in particular, the wrapping machine of Boriani comprises: a wrapping sheet supply device (19) for guiding a wrapping sheet (4) onto a path (11) intersecting a path (9) of an advancing work piece (3), a delivery guide device (33) having a transit aperture defined convex walls (45) and side walls (44) a brush (14) and a support bed (3) of the machine, a spreading guide (convex portion 45a) provided in the transit aperture for gradually

smoothing the wrapping sheet (4) as the work piece (3) is pushed through the transit aperture of the delivery guide device (33).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani et al. (US 5,782,063) in view of Jackson (US 2,098,245).

- The wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of smoothing pads formed by a plurality of bristles. It is known in the art that brush has used for spreading wrapping sheet over a work piece in order to remove air between the wrapping sheet and the work piece. Jackson discloses an old and well known wrapping machine that utilizes a brush (14) for spreading wrapping sheet (16) over a work piece (1) in order to remove air between the wrapping sheet (16) and the work piece (1). Therefore, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have modified the wrapping machine of Boriani by having provided a brush in each of the convex walls (45), as taught by Jackson, in order to spread the wrapping sheet over the work piece so as to remove air between the wrapping sheet and the work piece on both upper and lower faces of the work piece.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani (US 5,782,063) in view of Bronander (US 2,155,398).

- With respect to claim 9, the wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of a correction guide upstream of the delivery guide device that elastically sandwiches the work piece. It is well known in the art that work piece is conveyed into wrapping machine should be properly aligned by guide elements; for example, Bronander disclose a wrapping machine comprising a support surface "A" for supporting a work piece "X" to be wrapped, guide elements mounted on the support surface "A" for guiding the work piece "X" as the work piece is pushed by a pushing element (36) into the wrapping machine such that the work piece is properly aligned when entering the wrapping machine. It is also known in the art that such guide elements are resiliently mounted to the support surface so as to provide close tolerance without causing too much friction between the guide and the work piece in order to ensure the proper alignment of the work piece. Therefore, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the wrapping machine of Boriani with guide elements upstream of the delivery guide device, as taught by Bronander, in order to ensure proper alignment of the work piece as the work piece is delivered into the delivery guide device.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245) as applied to claim 8 above; and further in view of Bronander (US 2,155,398).

- With respect to claim 10, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of a correction guide upstream of the delivery guide device that elastically sandwiches the work piece. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the modified wrapping machine of Boriani with guide elements upstream of the delivery guide device in order to ensure proper alignment of the work piece as the work piece is delivered into the delivery guide device for the same reason as applied to claim 9 above.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Le Clair (US 2,597,877).

- With respect to claim 11, the wrapping machine of Boriani further include a plurality of suction belts (26) which meets all of applicant's claimed subject matter but lacks the specific teaching of the spacing between the suction belts gradually separates such that tension is placed on the wrapping sheet. It is known in the art that wrapping material such as plastic film web has a tendency of wrinkling or reducing width due to longitudinally pulling of the material. It is also well known in the art that suction belts are used in handling plastic film web, where the suction belts are arranged such that the spacing between the suction

belts gradually separates in order to keep the web wrinkle-free and to restore its original width. Le Clair discloses a web handling device that includes a plurality of suction belts (22) for spreading the wrinkled web (11) to its original width; wherein the suction belts (22) are set at an acute angle relative to the direction of travel of the web. Therefore, it would have been obvious to a skilled person in the art, at the time of the invention, to have set the suction belts at an acute angle, as taught by Le Clair, in order to spread the wrapping sheet to maintain the wrapping sheet at its original width and to keep the wrapping sheet wrinkle-free prior to wrapping the wrapping sheet onto the work piece.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245) as applied to claim 8 above; and further in view of Le Clair (US 2,597,877).

- With respect to claim 12, the modified wrapping machine of Boriani further include a plurality of suction belts (26) which meets all of applicant's claimed subject matter but lacks the specific teaching of the spacing between the suction belts gradually separates such that tension is placed on the wrapping sheet. However, it would have been obvious to a skilled person in the art, at the time of the invention, to have set the suction belts at an acute angle in order to spread the wrapping sheet to maintain the wrapping sheet at its original width and to keep the wrapping sheet wrinkle-free prior to wrapping the wrapping sheet onto the work piece for the same reason as applied to claim 11 above.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani (US 5,782,063) in view of Bronander (US 2,155,398) as applied to claim 9 above; and further in view of Le Clair (US 2,597,877).

- With respect to claim 13, the modified wrapping machine of Boriani further include a plurality of suction belts (26) which meets all of applicant's claimed subject matter but lacks the specific teaching of the spacing between the suction belts gradually separates such that tension is placed on the wrapping sheet. However, it would have been obvious to a skilled person in the art, at the time of the invention, to have set the suction belts at an acute angle in order to spread the wrapping sheet to maintain the wrapping sheet at its original width and to keep the wrapping sheet wrinkle-free prior to wrapping the wrapping sheet onto the work piece for the same reason as applied to claim 11 above.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245), further in view of Bronander (US 2,155,398) as applied to claim 10 above; and further in view of Le Clair (US 2,597,877).

- With respect to claim 14, the modified wrapping machine of Boriani further include a plurality of suction belts (26) which meets all of applicant's claimed subject matter but lacks the specific teaching of the spacing between the suction belts gradually separates such that tension is placed on the wrapping sheet. However, it would have been obvious to a skilled person in the art, at the time of the invention, to have set the suction belts at an acute angle in order to spread the

wrapping sheet to maintain the wrapping sheet at its original width and to keep the wrapping sheet wrinkle-free prior to wrapping the wrapping sheet onto the work piece for the same reason as applied to claim 11 above.

14. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Le Clair (US 2,597,877) as applied to claim 11 above; and further in view of Labine (US 2,930,173).

- With respect to claim 15, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of at least three suction belts being provided. Labine teaches that wrapping material having wide width should be handled by at least three suction belts (26-27-26). It would have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided at least three suction belts, as taught by Labine, for handling wrapping sheet of wider width if the work piece is substantially wide and requires such wider width wrapping sheet. Regarding the limitation of the suction belt located in the center having a non-suction area in the vicinity of the transporting path of the work piece, Labine discloses Fig. 2 that the center suction belt (27) is configured to be shorter than the two outer suction belts (26) and has a non-suction area occupied by an idle pulley (40) in the vicinity of the transporting path of the work piece so that the work piece to be wrapped can pass under the center suction and along the transporting path of the work piece. Thus the modified wrapping machine of

Boriani would also have a center suction belt being shorter than the two outer suction belts, wherein the center suction belt would have non-suction area occupied by an idle pulley in the vicinity of the transporting path of the work piece.

15. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245), further in view of Le Clair (US 2,597,877) as applied to claim 12 above; and further in view of Labine (US 2,930,173).

- With respect to claim 16, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of at least three suction belts being provided. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided at least three suction belts for handling wrapping sheet of wider width if the work piece is substantially wide and requires such wider width wrapping sheet for the same reason as applied to claim 15 above.

16. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani (US 5,782,063) in view of Bronander (US 2,155,398), further in view of Le Clair (US 2,597,877) as applied to claim 13 above; and further in view of Labine (US 2,930,173).

- With respect to claim 16, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of at least three

suction belts being provided. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided at least three suction belts for handling wrapping sheet of wider width if the work piece is substantially wide and requires such wider width wrapping sheet for the same reason as applied to claim 15 above.

17. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245), further in view of Bronander (US 2,155,398) and Le Clair (US 2,597,877) as applied to claim 14 above; and further in view of Labine (US 2,930,173).

- With respect to claim 18, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of at least three suction belts being provided. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided at least three suction belts for handling wrapping sheet of wider width if the work piece is substantially wide and requires such wider width wrapping sheet for the same reason as applied to claim 15 above.

18. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Le Clair (US 2,597,877) as applied to claim 11 above; and further in view of Rodrigo (US 5,245,503).

- With respect to claim 19, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of an air guide for discharging de-electrification air. It is known in the art that static charges exist on plasticized wrapping material web which attract dust particles, and in particular, these static charges do exist on wrapping sheet and tend to adhere the wrapping sheet to the work piece that would interfere with the wrapping process. Different types of device for eliminating static charge have been known in the art, Rodrigo discloses one such device that conveys a stream of ionized air in a fanned out distribution pattern over a work surface in order to eliminate the static charges on the work surface. Knowing that static charges on wrapping material would interfere with the wrapping process, it would, therefore, have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided a device for eliminating static charges, such as one taught by Rodrigo, in order to eliminate the static charge on the wrapping sheet.

19. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245) further in view of Le Clair (US 2,597,877) as applied to claim 12 above; and further in view of Rodrigo (US 5,245,503).

- With respect to claim 20, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of an air guide for discharging de-electrification air. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the wrapping machine of Boriani with a device for eliminating static charges in order to eliminate the static charge on the wrapping sheet for the same reason as applied to claim 19 above.

20. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani (US 5,782,063) in view of Bronander (US 2,155,398), further in view of Le Clair (US 2,597,877) as applied to claim 13 above; and further in view of Rodrigo (US 5,245,503).

- With respect to claim 21, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of an air guide for discharging de-electrification air. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the wrapping machine of Boriani with a device for eliminating static charges in order to eliminate the static charge on the wrapping sheet for the same reason as applied to claim 19 above.

21. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245), further in view of Bronander (US 2,155,398) and

Le Clair (US 2,597,877) as applied to claim 14 above; and further in view of Rodrigo (US 5,245,503).

- With respect to claim 22, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of an air guide for discharging de-electrification air. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the wrapping machine of Boriani with a device for eliminating static charges in order to eliminate the static charge on the wrapping sheet for the same reason as applied to claim 19 above.

*Conclusion*

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is cited on form PTO-892 along with the applied prior art.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is 571-272-4462. The examiner can normally be reached on M-F from 8:00AM to 3:00PM.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 10, 2008

/Louis K. Huynh/  
Primary Examiner  
Art Unit 3721